# PubPol/Econ 541

Class 23

# **Dumping and Anti-Dumping Policy**

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# Announcements

- Course Evaluations
  - Please do them when they become available
- Quiz:

| | Q9 | Q10 | Q11 |
|---|---|---|---|
| Mean | 6.58 | 6.58 | 7.94 |
| Median | 6.5 | 6.25 | 8.5 |
| Max | 9.5 | 10 | 10 |
| Min | 5 | 5 | 5 |
| Standard deviation | 1.18 | 1.32 | 1.47 |

# Pause for Discussion

# Questions on Jackson

- Under what circumstances are imports regarded as “dumped”?
- What is the “dumping margin”?

# Dumping and Anti-Dumping

- Dumping is defined as exporting for a price below a "fair price," defined as

  EITHER
  - What the exporter charges in its home market,

  OR
  - Cost
- Anti-dumping duties (ADD) are permitted by the GATT/WTO if set equal to (or below)
  - The dumping margin: the difference between fair price and the export price

# Outline

- Why firms dump
  - Predation?  No
  - Protected home market
  - Interface problem
  - Other reasons
- Procedures and data
- Anti-dumping issues
- Economic effects of anti-dumping duties

# Outline

- Why firms dump
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# Predation

- Defined as selling at low price in order to
  - Drive competitors out of business

  AND THEN
  - Charge monopoly price

# Predation

- Does predation happen?
  - Within economies yes. (e.g., Microsoft Explorer)
  - Internationally? Rarely if ever
    - Dumping is usually alleged against multiple firms and sometimes multiple countries
    - Later monopoly pricing is therefore very unlikely

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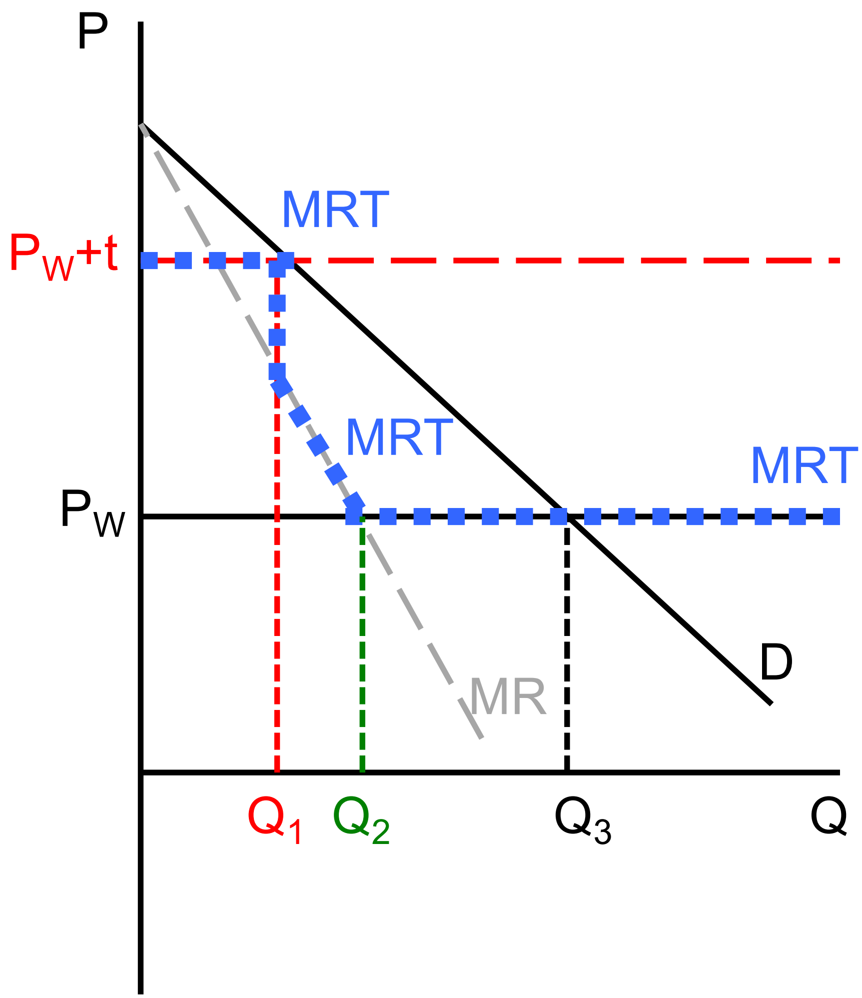
# Protected Home Market

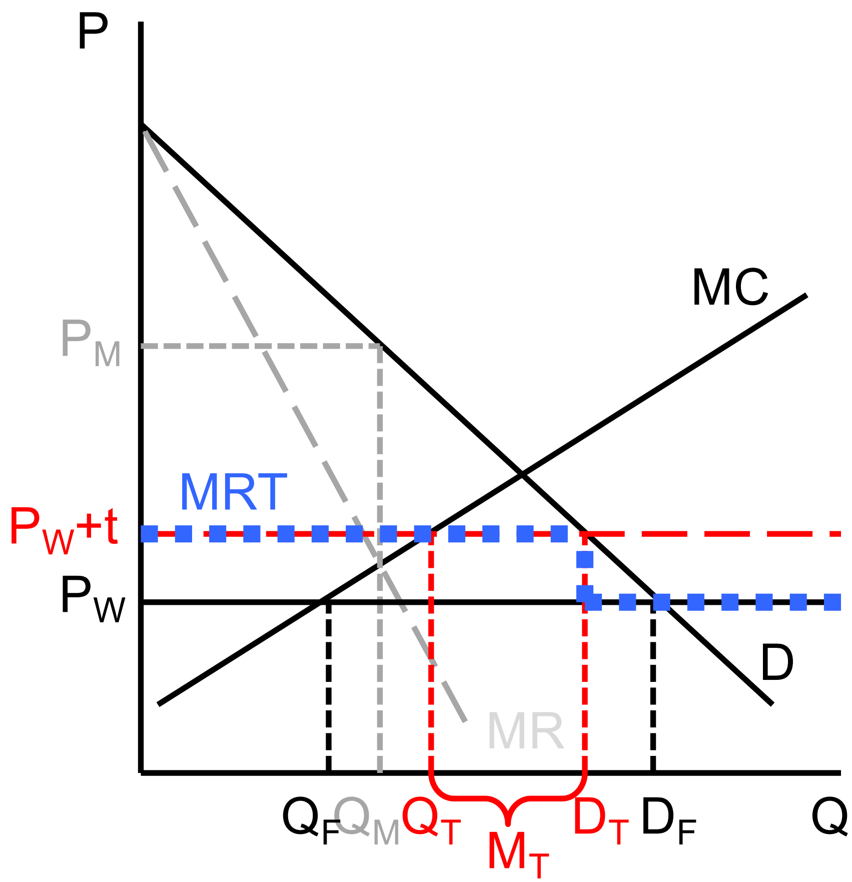
- Does a tariff cause dumping?
  - It raises the home price above the world price
  - If home firm also exports at the world price, then that would be dumping
  - But with perfect competition, no home firm would export, since it gets a higher price at home.
- So a protected home market only causes dumping with imperfect competition
- We'll look at a case of a single home firm, thus a monopoly in the home market

# Marginal Revenue of a Monopoly protected by a Tariff



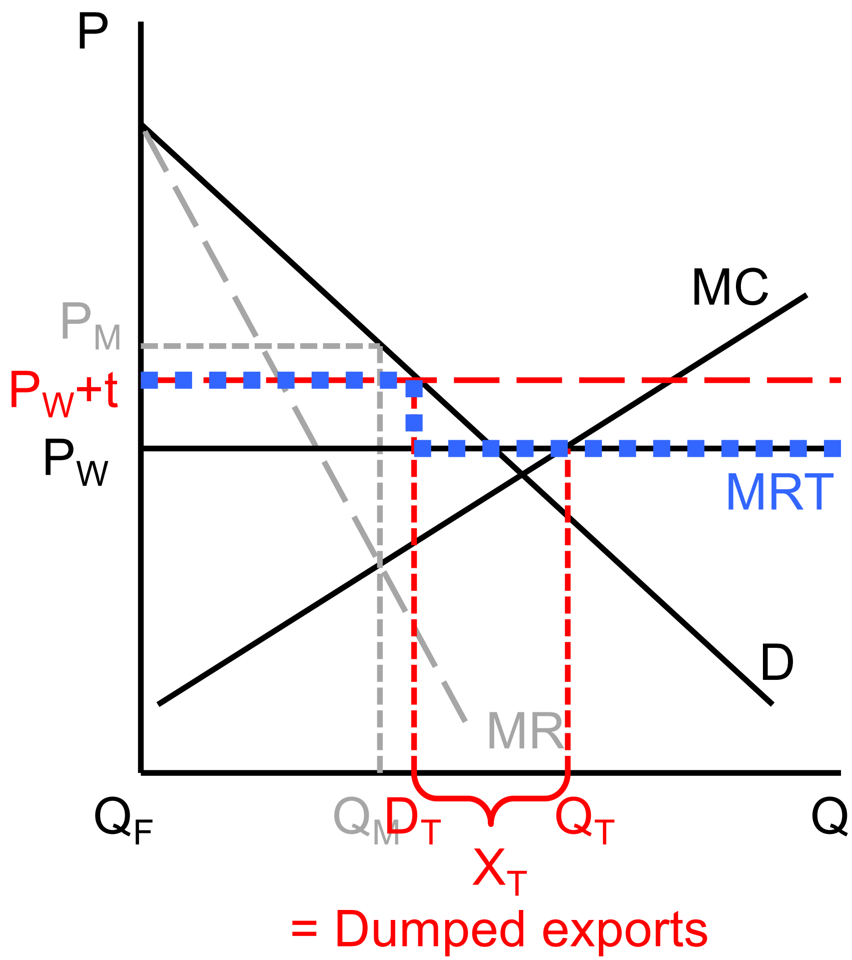

- The usual MR curve for a monopolist in a closed economy is is mostly not relevant for a firm facing
  - a world price $P_W$ at which it can export and
  - an upper limit $P_W$+t on what it can charge in the home market.
- MRT (marginal revenue in presence of a tariff) is
  - $P_W$+t for sales up to $Q_1$
  - MR for sales between $Q_1$ and $Q_2$ (sales along demand curve)
  - $P_W$ for sales above $Q_2$ (exports above $Q_3$)

# Recall Monopoly with Tariff



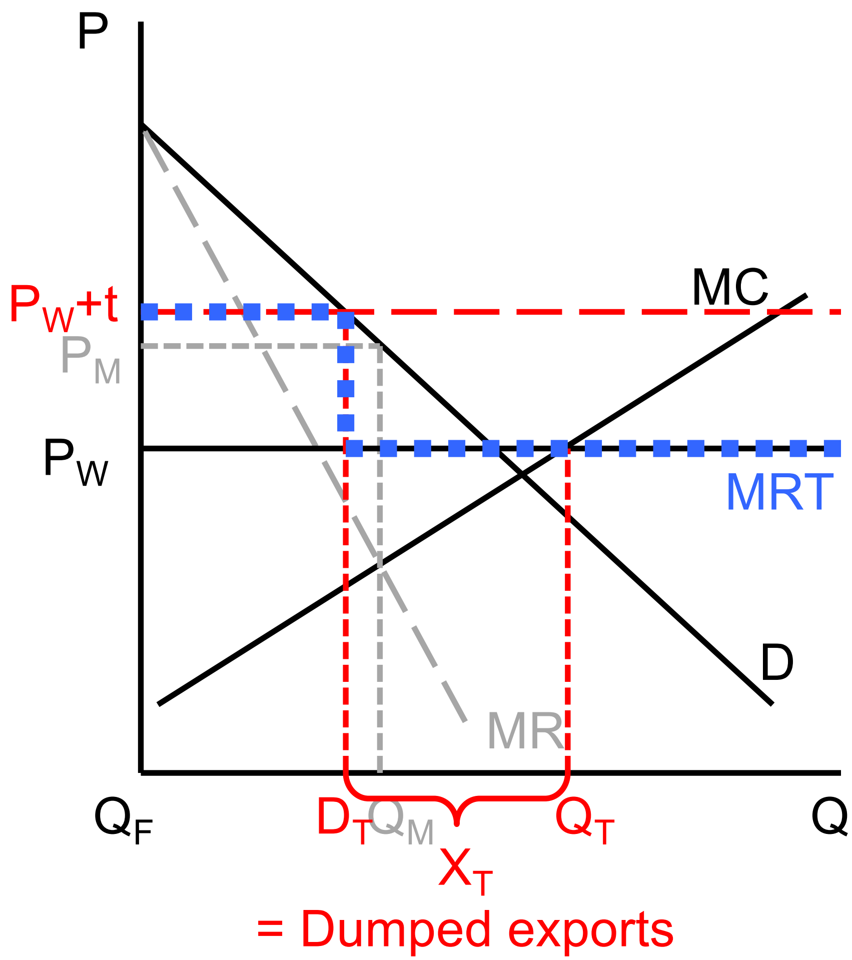

- Here the world price is low enough that the monopolist does not export.
- It can sell up to $D_T$ at price $P_W$+t, so that is its marginal revenue. Equating that to MC, it produces only $Q_T$ and demanders import the rest.
- It is not exporting, and therefore not dumping.

# Monopoly with Small Tariff



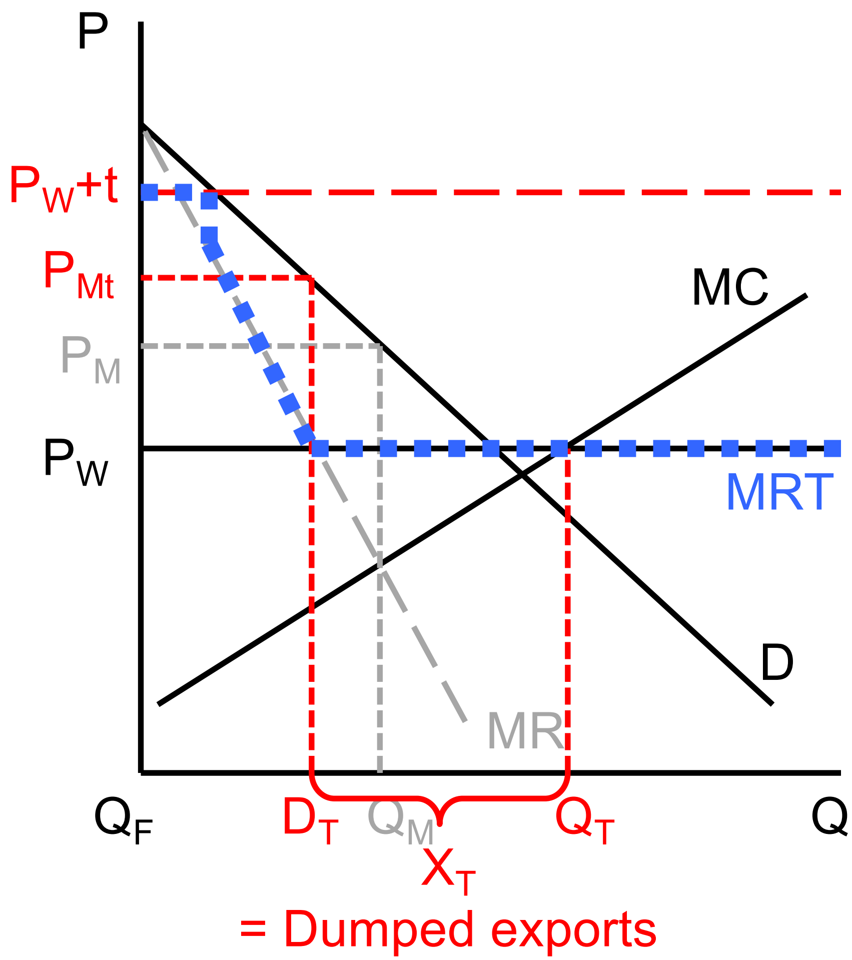

- But suppose $P_W$ is higher
- Again the firm can sell up to $D_T$ at price $P_W+t$,
- But now it can also sell more at price $P_W$ which is above its MC. Its marginal revenue from exporting is $P_W$, so it produces $Q_T$ where $P_W$=MC
- It is charging $P_W+t$ at home and $P_W$ abroad, <u>so it is dumping</u>.

# Monopoly with Medium Tariff




- With a somewhat higher tariff, the firm charges an even higher price at home, sells less there but exports more.
- Again it is charging $P_W$+t at home and $P_W$ abroad, so it is dumping.
- Note that it is now selling domestically at more than the closed-economy monopoly price.

# Monopoly with High Tariff




- With an even higher tariff, the firm would lose profit if it charged $P_W$+t at home.
- Instead it charges $P_{Mt}$ equating marginal revenue to marginal cost.
- But the relevant marginal cost for sales at home is not MC, but rather $P_W$, since that is the opportunity cost of selling at home instead of exporting.
- Again it is charging $P_{Mt}$ at home and $P_W$ abroad, <u>so it is dumping</u>.

# Pause for Discussion

# Questions (not asked before)

- Why will a tariff not cause dumping (by price definition) if markets are perfectly competitive?
- If dumping is due to a protected home market, to what extent is it harmful to the
  - Importing country?
  - Exporting country?

# Outline

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# The Interface Problem

- Countries with different cultures and institutions may encounter frictions at the border as a result.
- Example from the Jackson text:
    - Japan: Worker tenure; mostly debt financing
    - US:  No worker tenure; more equity financing
  - Leads to differences in fixed costs (F) and variable costs (V), even when total costs are same

# The Interface Problem

| Costs | | Japan | | US | |
|---|---|---|---|---|---|
| | | F | V | F | V |

# The Interface Problem

| Costs | | Japan | | US | |
|---|---|---|---|---|---|
| | | F | V | F | V |
| | Plant | 20 | | 20 | |
| | Debt service 100 | 90 | | 50 | |
| | Dividends | | 10 | | 50 |
| | Labor | 240 | | | 240 |
| | Materials | | 240 | | 240 |
| Total cost | | 600 | | 600 | |
| | | | | | |
| | Fixed | 350 | | 70 | |
| | Variable | | 250 | | 530 |

At prices 250<P<530: Japan produces; US shuts down

To US, looks like P<MC

# The Interface Problem

- Japan-US
  - Differences in normal behavior lead naturally to conflict and misunderstanding
  - This was Jackson's example

# The Interface Problem

- China-Other
  – China's political system differs from the democracies of other major traders
    - Much greater use of state-owned firms
    - Communist Party plays a role even in private firms
  – Others see subsidies where China sees national interest

# The Interface Problem

- EU-US
  - Recall semiconductor conflict
    - EU
      - Has carbon price and carbon tariff to encourage green production
      - Bans subsidies by member nations
    - US
      - No carbon tax, as it is not politically viable
      - Prefers subsidies for green production

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# Other Reasons for Dumping

- Below-average-cost dumping
  - Temporary weak demand (recession)
  - World excess supply
- Below-marginal-cost dumping
  - Producer learning
  - Consumer learning
- Other thoughts?

# Pause for Discussion

# Questions on Deardorff, (“Economic Perspectives…”)

- Why might an exporter dump, based on the below-cost definition? Who is harmed in these cases (answer may depend on which of several reasons apply)?
- How common is “predatory dumping”, and why?

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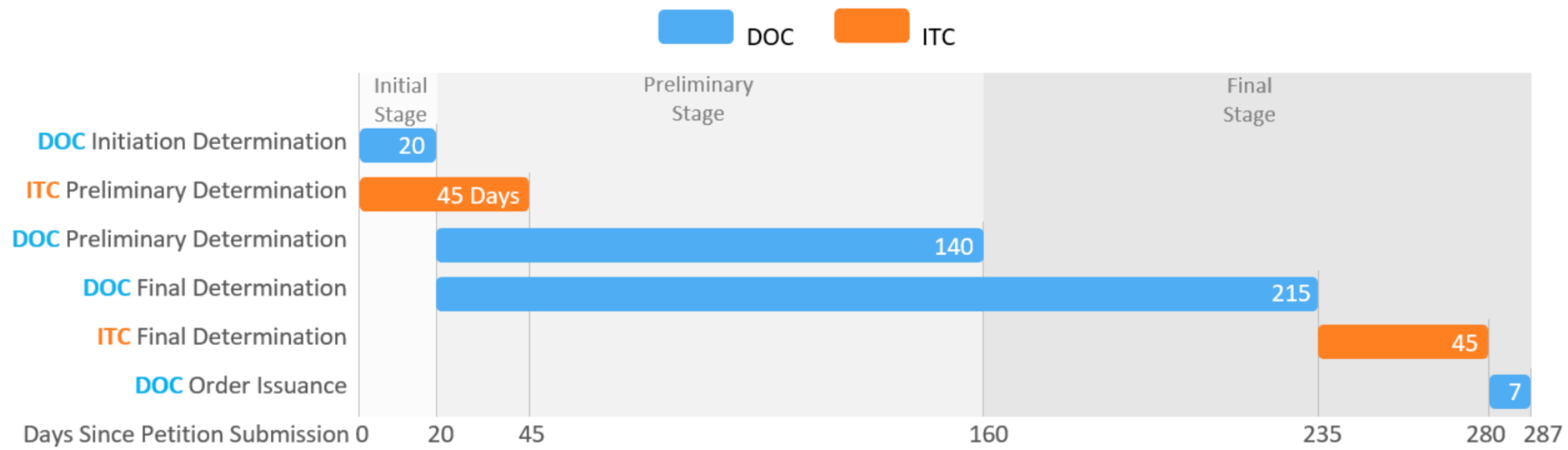
# US Procedures for ADD

1. File in both Commerce (ITA) and USITC
2. < 45 days: Preliminary injury determination by USITC
3. < 160 days: Preliminary dumping margin by ITA

   (if yes, action at the border)
4. < 235 days: Final margin
5. < 280 Days: Final injury

Throughout: Settlement is possible!

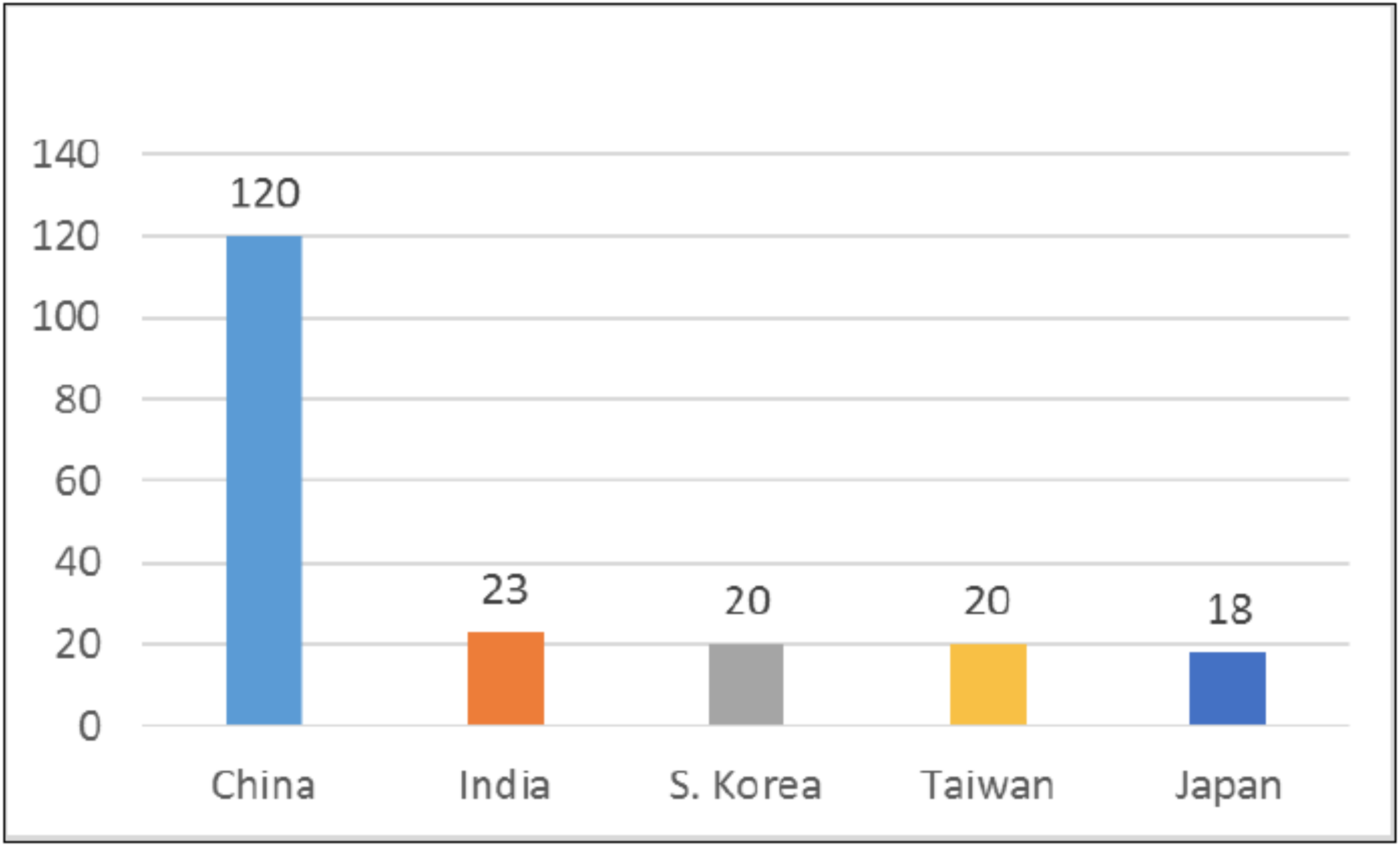
Statutory Time Frame for Antidumping Duty Investigations



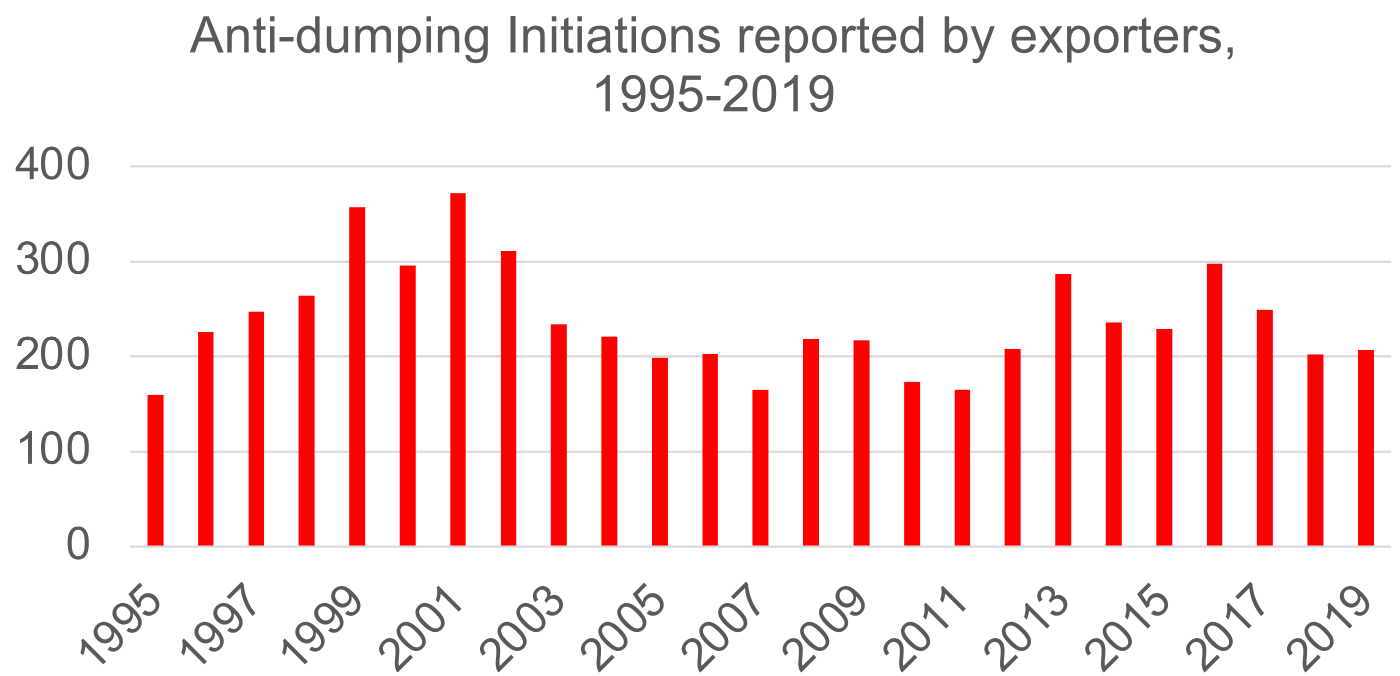

*The DOC determination dates may be extended under certain circumstances. Note that if at any point a DOC or ITC determination (excluding the DOC Preliminary Determination) is negative, the investigation will terminate. When the DOC and ITC's final determinations are affirmative, the DOC will issue an AD order within approximately seven days after the ITC's final determination.

**Figure 1. Major Targets of U.S. AD Orders**

(In place as of December 14, 2018)




**Source:** U.S. International Trade Commission.


Anti-dumping Initiations reported by exporters, 1995-2019
400
300
200
100
0
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019

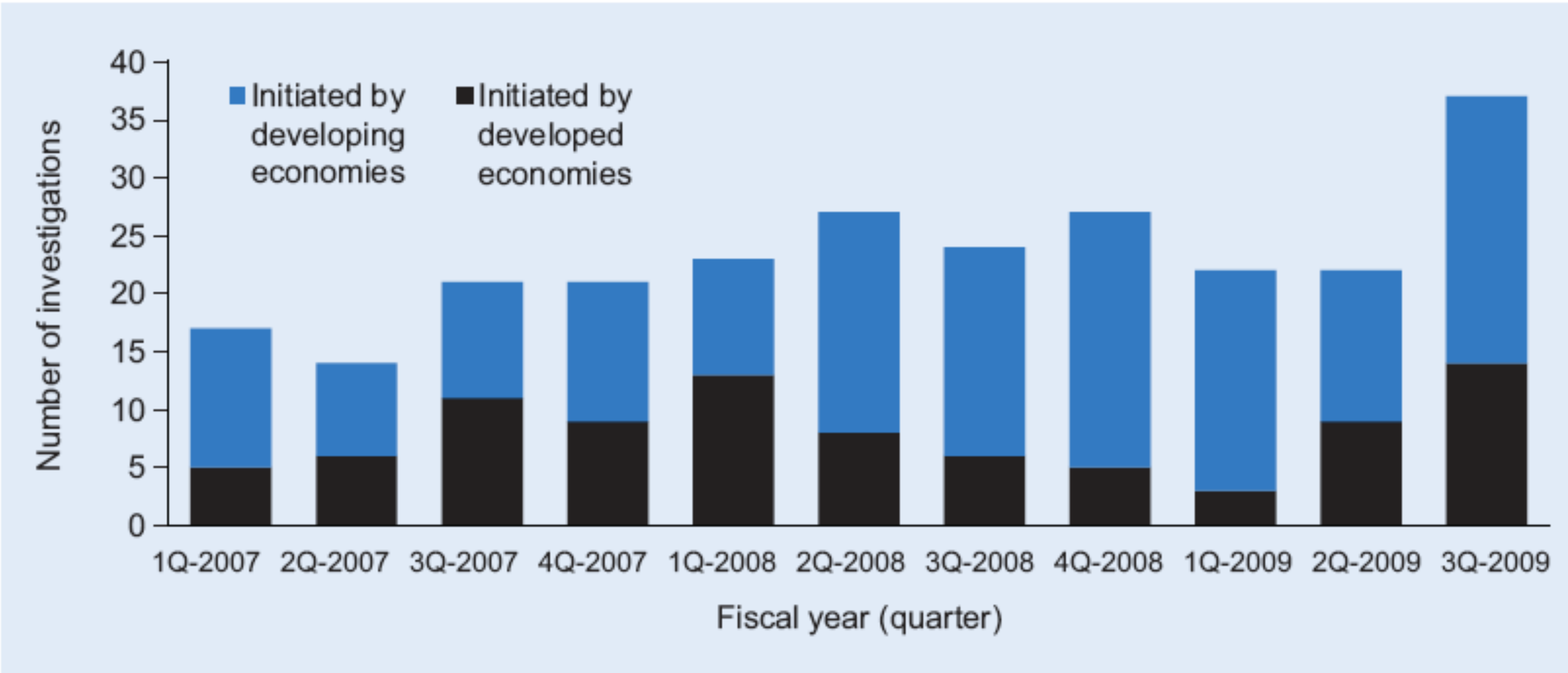
Source: WTO

# Top targets of anti-dumping investigations, 1995-2019

| | Exporter | |
|---|---|---|
| 1 | China | 1392 |
| 2 | Korea, Republic of | 447 |
| 3 | Chinese Taipei | 315 |
| 4 | United States | 298 |
| 5 | India | 241 |
| 6 | Thailand | 238 |
| 7 | Japan | 230 |
| 8 | Indonesia | 218 |
| 9 | Russian Federation | 173 |
| 10 | Malaysia | 165 |
| 11 | Brazil | 159 |
| 12 | European Union | 133 |
| 13 | Germany | 119 |
| 14 | Turkey | 103 |
| 15 | Ukraine | 94 |

Source: WTO

- **Newly Initiated Antidumping Investigations, 1Q 2007–3Q 2009**




- *Source: Global Antidumping Database.*

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# Anti-Dumping Issues

- Cumulation
- Margins analysis
- Lesser-Duty Rule
- Nonmarket economies

# Pause for Discussion

# Questions on Jackson

- Does "cumulation" make it more or less likely that a country whose exports are dumped will face an anti-dumping duty?
- Does "margins analysis" make it more or less likely that a country whose exports are dumped will face an anti-dumping duty?

# Anti-Dumping Issues

- Cumulation
- Margins analysis
- Lesser-Duty Rule
- Nonmarket economies

# Pause for Discussion

# Questions on Jackson

- What is the level of the injury test in dumping cases?
- If dumping and injury are both found, what determines the size of the anti-dumping duty?  Must it then be applied?  Are the rules any different in the EU than in the US?

# Questions on Jackson (cont.)

- What is the “lesser-duty rule”? In what countries is it applied, and in what countries is it not applied?
- Suppose an anti-dumping duty will cause harm to some in an economy that is greater than the benefit to the protected industry.
  - Can authorities therefore choose not levy the duty?
  - For those who can decline to levy the duty, what must be true in order for them to do so?

# Questions on EC, DG-Trade

- Who decides on anti-dumping in the EU?
- Do the criteria for anti-dumping measures differ from those of the US?
- What forms do EU anti-dumping measures take, and for how long?
- What is the size of an anti-dumping duty in the EU?

# Questions on Jakob, "Lesser Duty Rule…"

- What does Jakob view as "fair competition"?
- What is the "lesser-duty rule"?
  - In what countries is it applied, and in what countries is it not applied?
  - In those that apply it, how often has the smaller injury margin been used?
- In what countries can an anti-dumping duty be denied based on other interests of the country?
  - What is the "proportionality test" for this?

# Anti-Dumping Issues

- Cumulation
- Margins analysis
- Lesser-Duty Rule
- Nonmarket economies

# Nonmarket-economy status

- In most cases, the ”fair price” is found from the exporting country’s own market
  - The price of the good, or
  - The cost of producing it there
- If exporter is a “nonmarket economy” then those prices are not meaningful
  - Instead, fair price may be inferred from data of an otherwise comparable market economy
  - This typically finds a much higher price and therefore a
    - Larger dumping margin
    - Larger anti-dumping duty
- This was contentious when China objected to being labelled as nonmarket, but they lost their case in WTO

# Pause for Discussion

# Questions on Hayashi, "U.S. Downgrades Russia…"

- Can you tell from this why nonmarket status is important?
- Why is the change unlikely to have much effect on Russia-US trade right now?
- On what basis does the US justify this change?
- What other countries have nonmarket status in the US?
- How many countries, other than Russia, have been moved from market status to nonmarket status?

# Questions on Leahy et al., "China launches anti-dumping …"

- Did the pork producers in China request this investigation?
- What is presumed to be the motive for this investigation, according to this?
- What evidence is mentioned here that EU pork was being dumped in China?
- Will the EU tariffs on Chinese EVs necessarily go into effect?
- Are other anti-dumping cases mentioned here?
- Though it is not mentioned here, does it look like China could have instead used a safeguards tariff?

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- Economic Effects of ADD

# Economic Effects of ADD

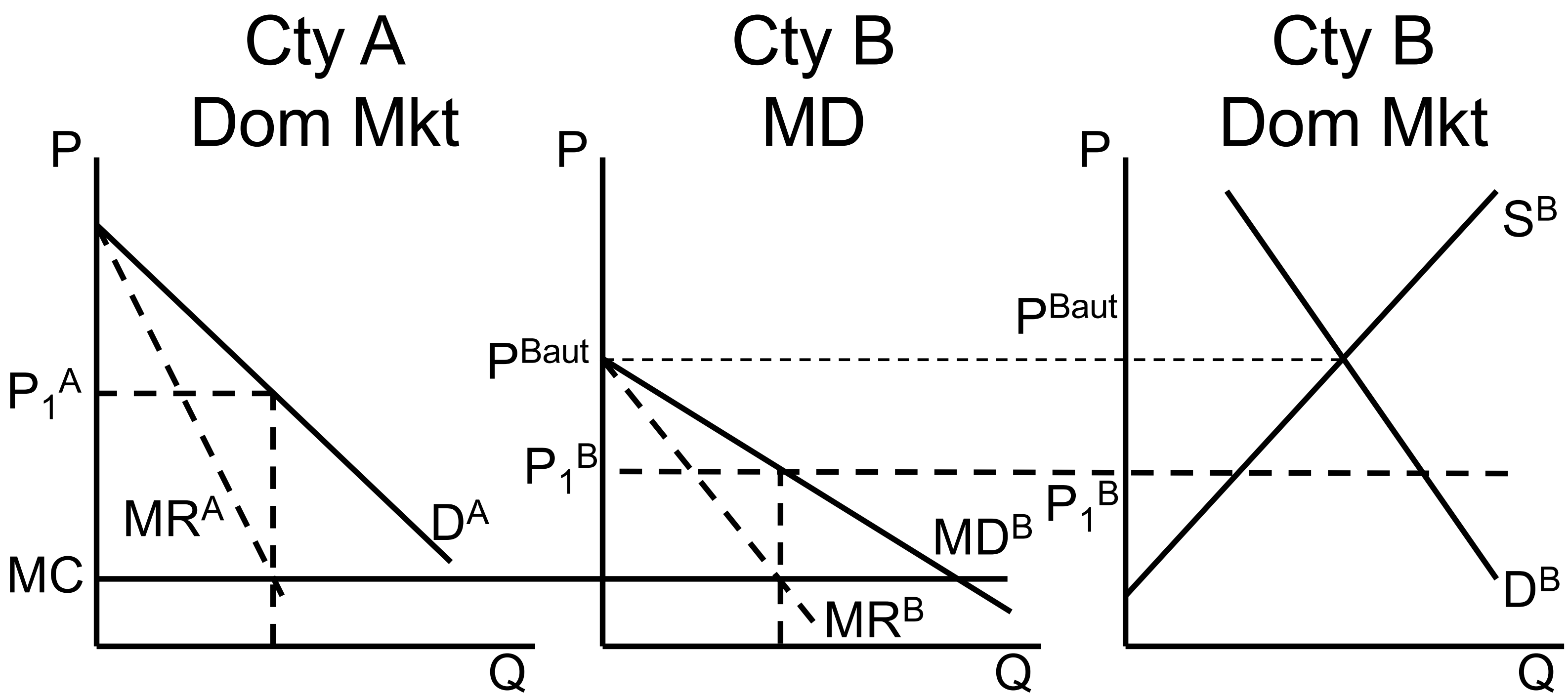
- Effects of an Anti-Dumping duty depend on how the dumping firm responds
  1. It may <u>keep</u> its exporting <u>price unchanged</u>
  2. It may <u>readjust its prices</u> in the presence of the duty
  3. It may <u>not dump</u> (perhaps to forestall the ADD): change its pricing policy to charge the same price in both markets

     Note that this may happen even without dumping ever being alleged

# Effects of ADD

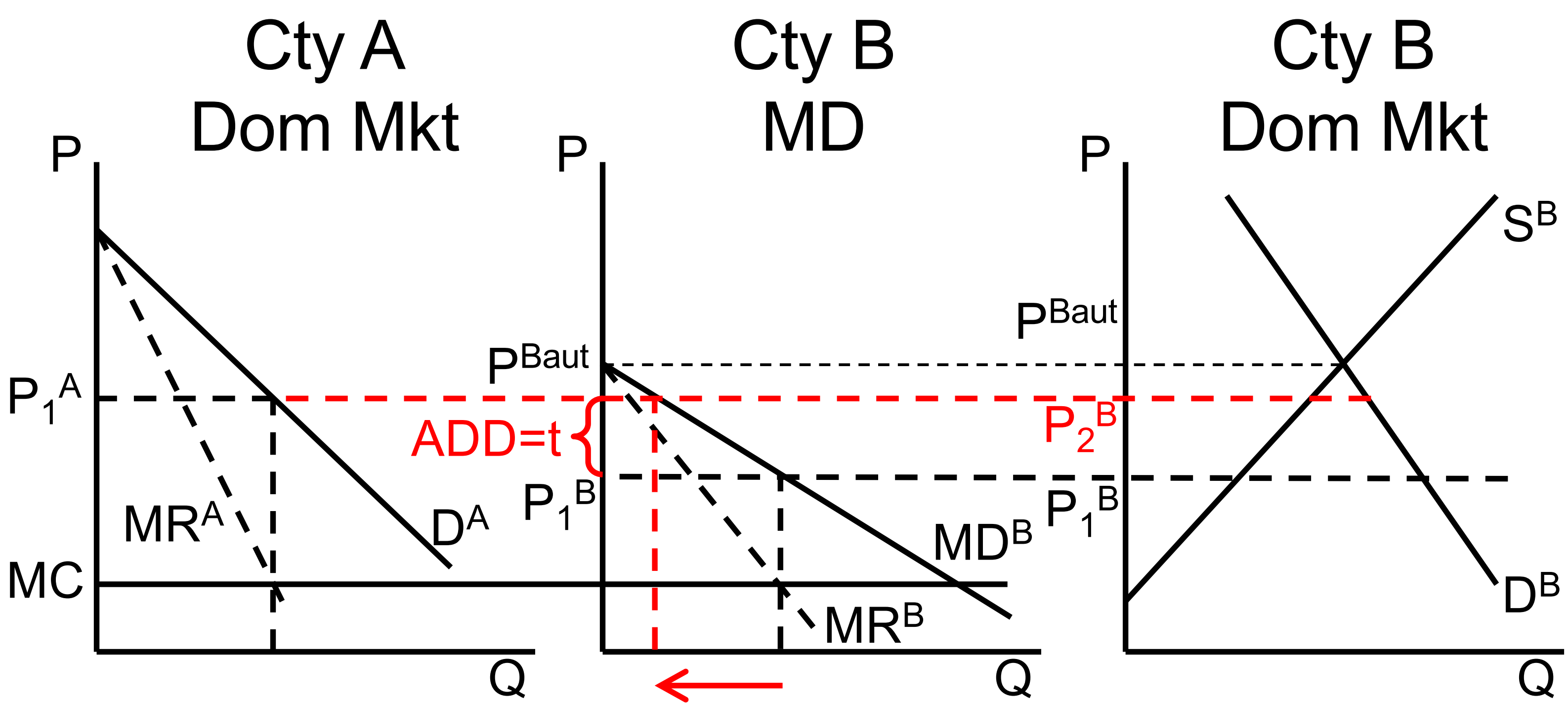
- Model
  - Single firm at home (thus monopoly in autarky)
  - Faces downward sloping demand from abroad
  - Protected by prohibitive tariff, so that it <u>can</u> charge a lower price for export than at home
  - Uses monopoly pricing (MC=MR) in both markets separately
  - Assumes firm’s marginal cost is constant and same for both markets

# Dumping Equilibrium




- Consider an equilibrium with a single firm at home (A) that can also export to a foreign market, B, whose home supply and demand lead to the import demand curve $MD^B$ shown
- Assume Country A's domestic market is protected by a prohibitive tariff
- As drawn, $P_1^A > P_1^B$ so the firm is dumping

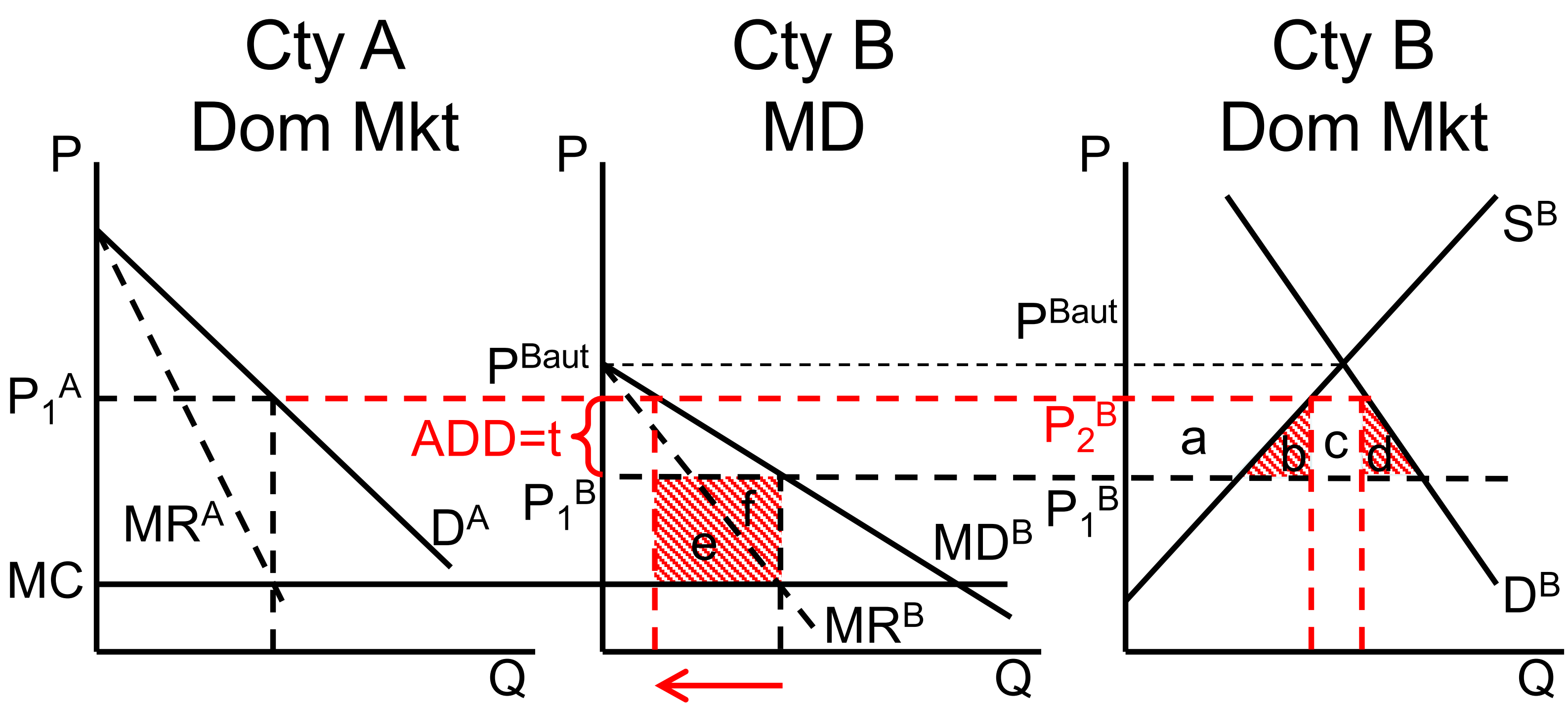
# 1. ADD Effects with unchanged export price




- With $P_1^B$ fixed, ADD raises price to demanders like any other tariff, and imports fall

- Note welfare effects

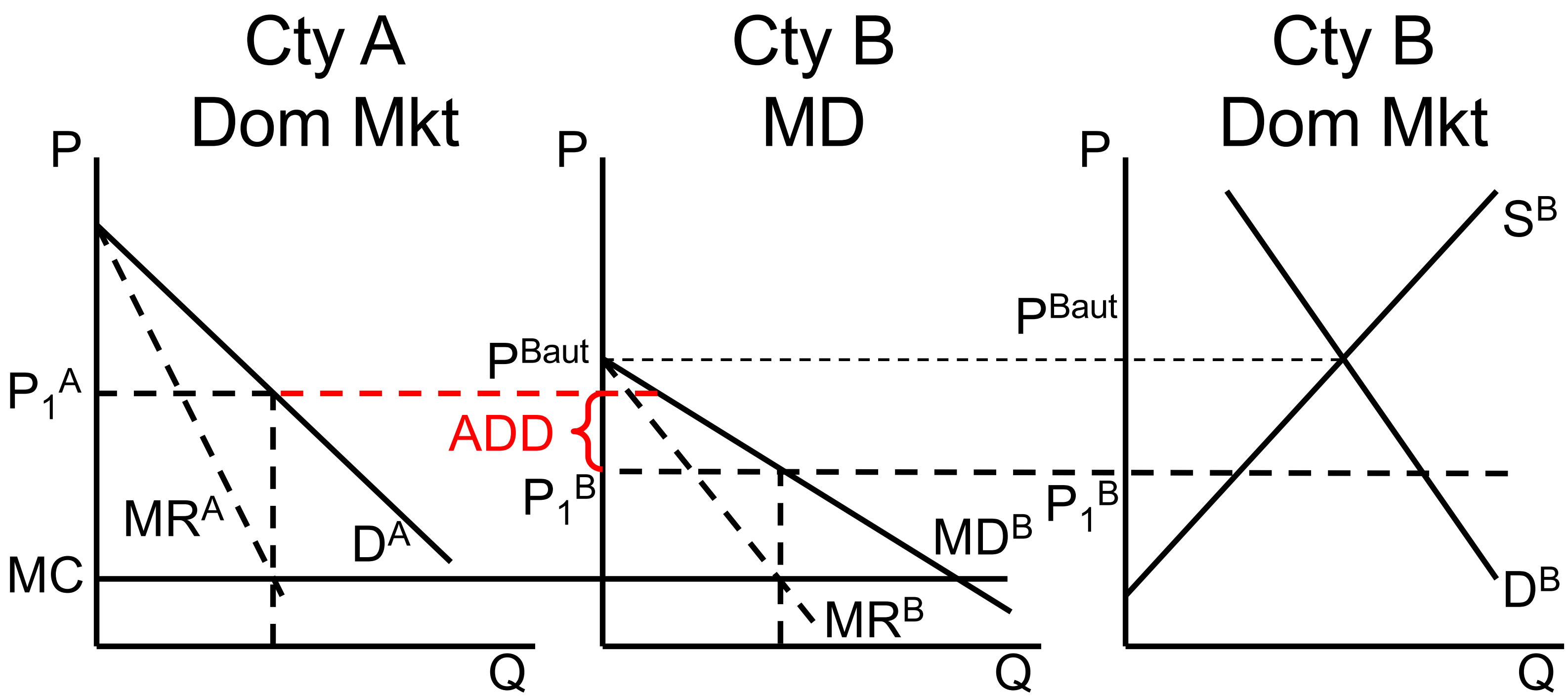
# 1. ADD Effects with unchanged export price




| Welfare Effects of ADD in Dumping Country, A's firm: | |
|---|---|
| Lost profit | −(e+f) |
| Cty B | −(e+f) |

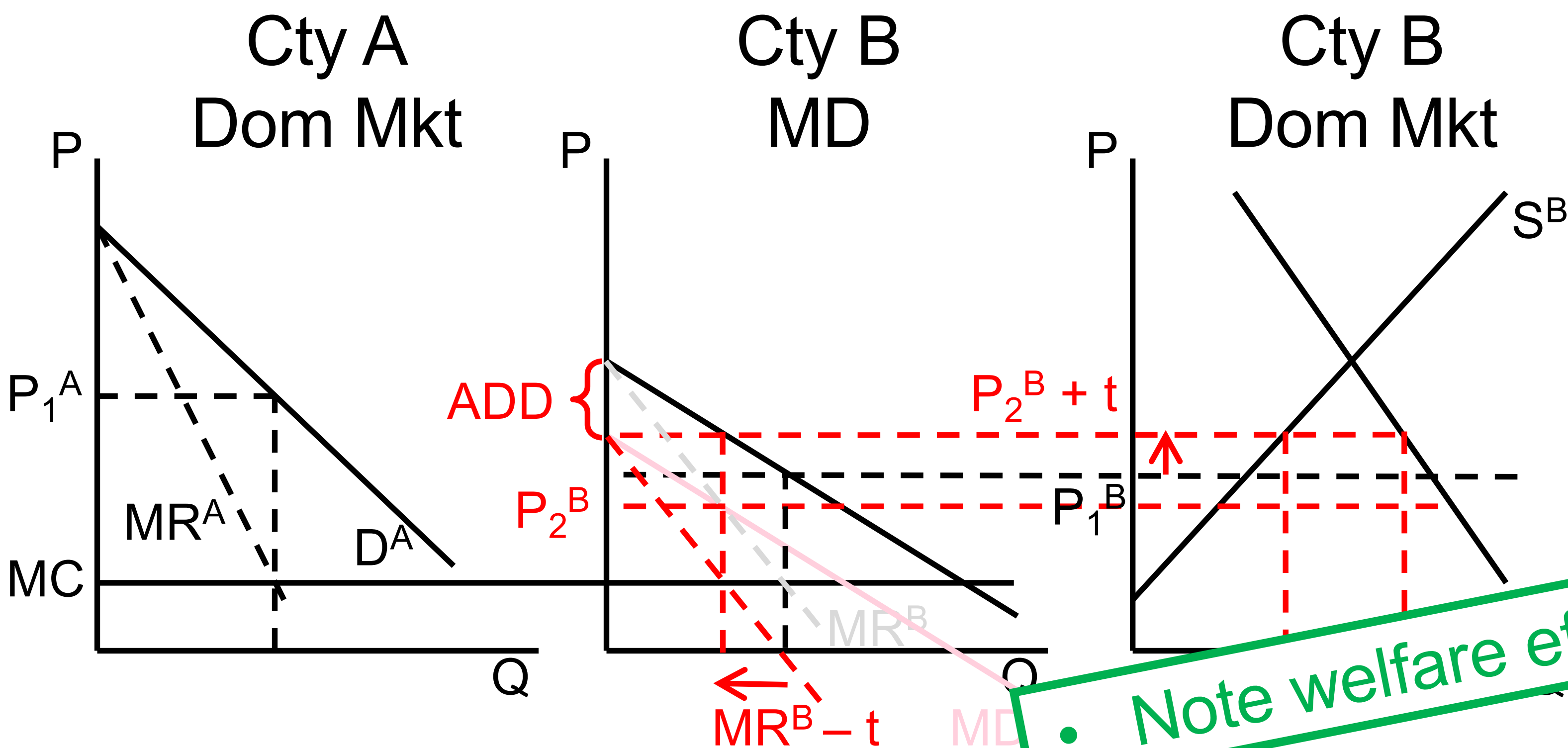
| Welfare Effects of ADD in Importing Country, B: | |
|---|---|
| Suppliers gain | +a |
| Demanders lose | −(a+b+c+d) |
| A's gov't | +c |
| Cty A | −(b+d) |

# 2. ADD Effects with <u>changed</u> export price




- If $P_1^A$ and $P_1^B$ can readjust, $P_1^A$ will not change

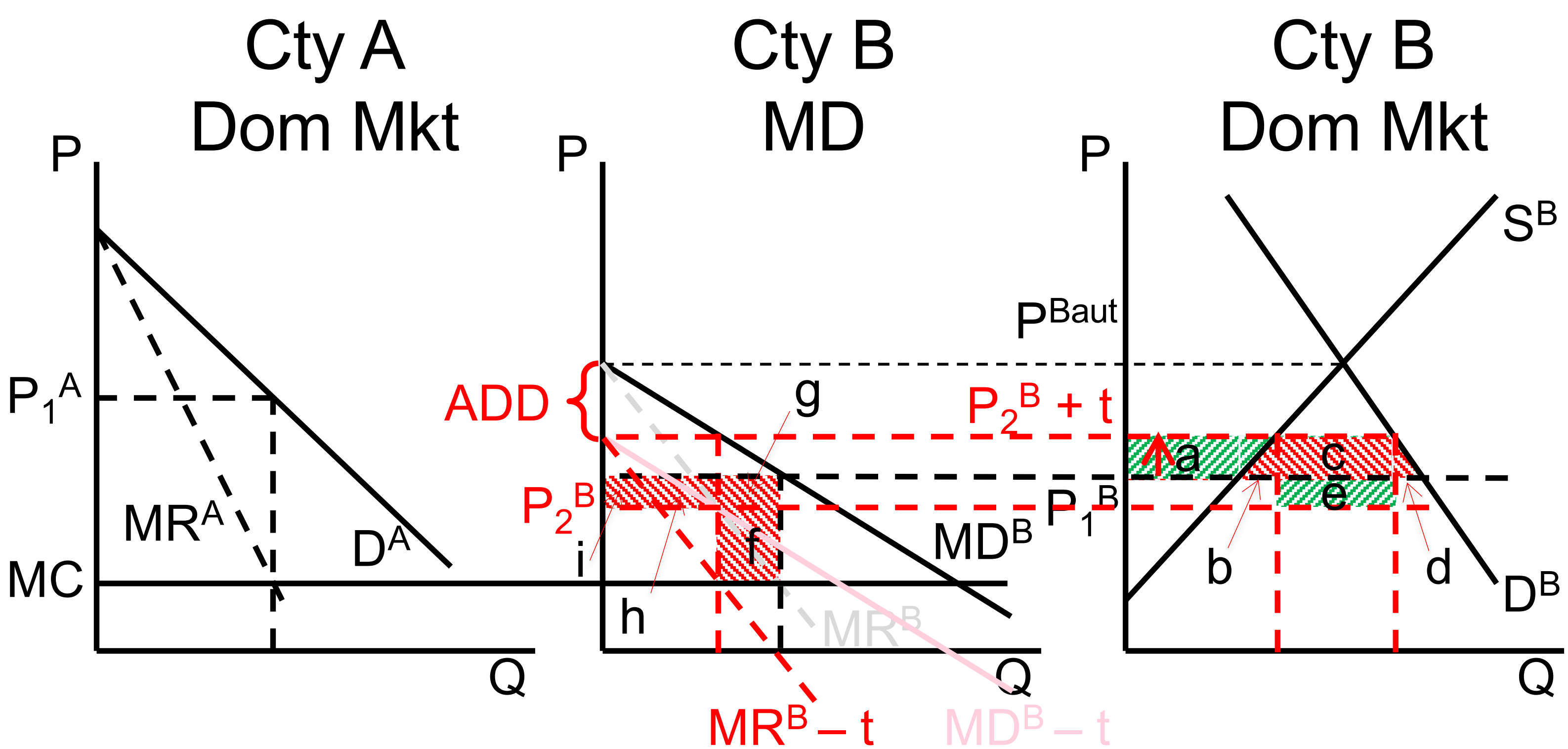
# 2. ADD Effects with changed export price




- Note welfare effects

- If $P_1^A$ and $P_1^B$ can readjust, $P_1^A$ will not change
- ADD, set equal to $P_1^A – P_1^B$, acts as downward shift in demand (and MR) for the exporting firm
- Effect is to lower export price but by less than tariff

# 2. ADD Effects with changed export price




Welfare Effects of ADD in Dumping Country, A's firm:

Lost profit on lost sales −(f+g)

Lost profit on kept sales <u>−(h+i)</u>

Cty B (firm) −(f+g+h+i)

Welfare Effects of ADD in Importing Country, B:

Suppliers gain +a

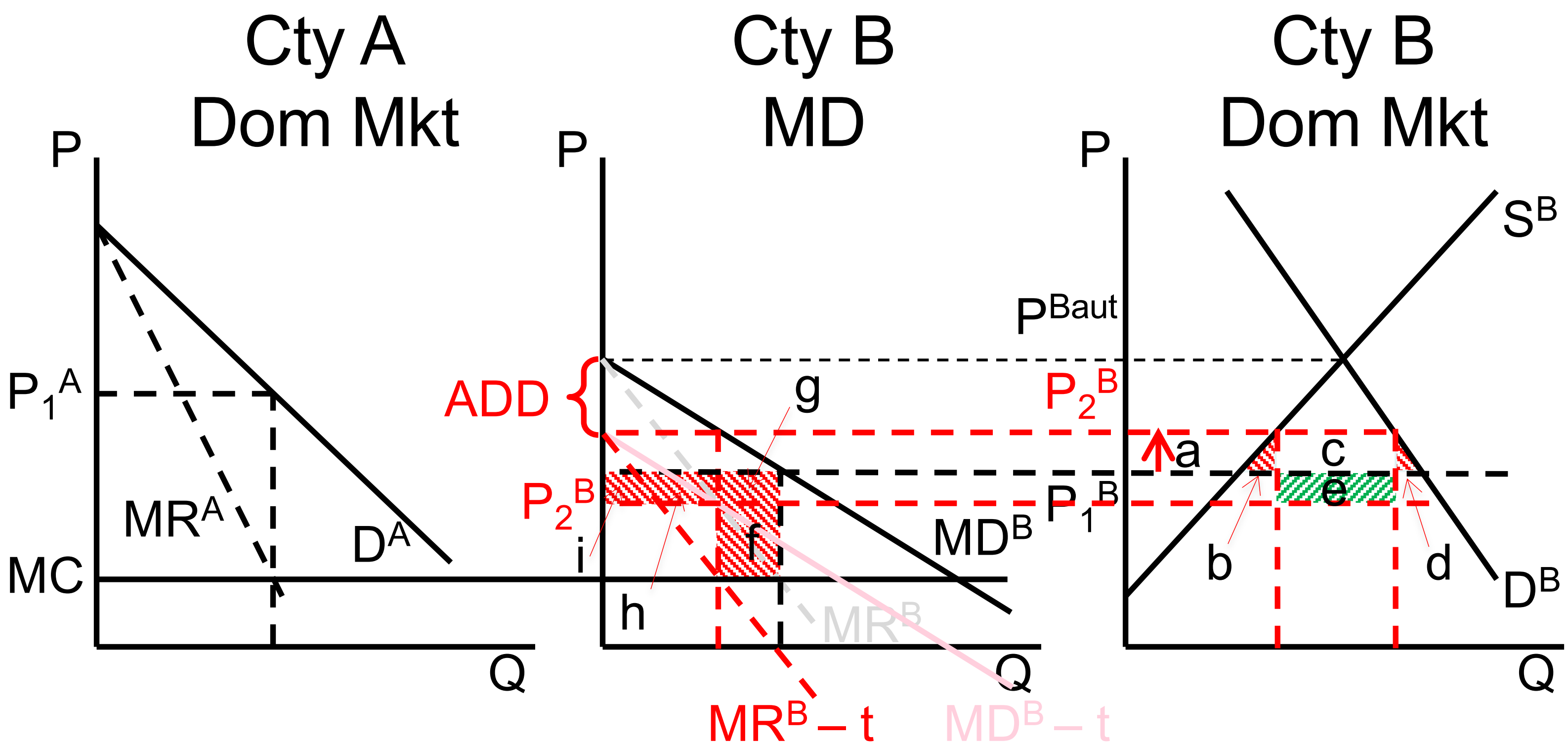
Demanders lose −(a+b+c+d)

A's gov't <u>+(c+e)</u>

Cty A e−(b+d)

Net <u>gain</u> if e > (b+d)

# 2. ADD Effects with changed export price




**Welfare Effects of ADD for world:**
Note that (h+i) = e

So world loses (f+g) + (b+d)

**Welfare Effects of ADD in Dumping Country, A's firm:**

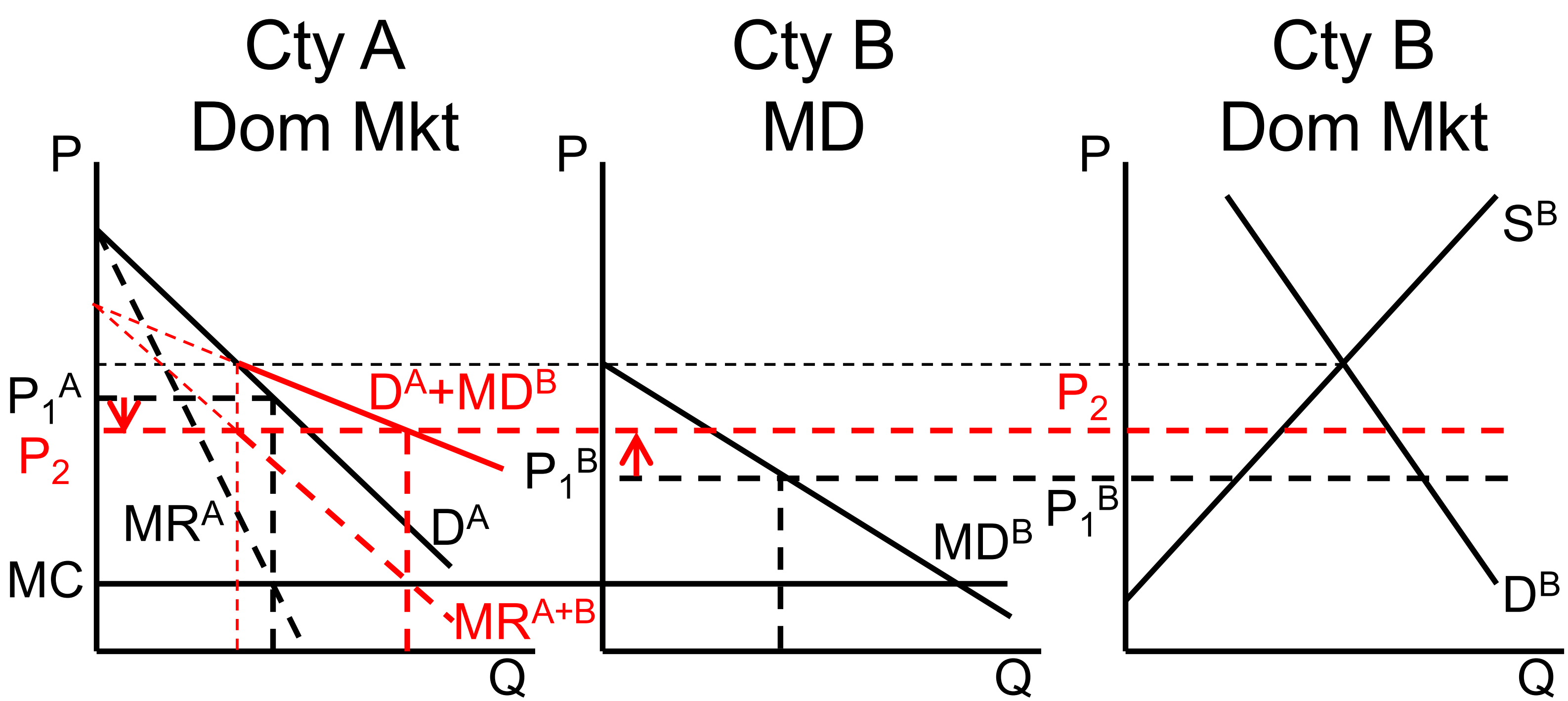
| | |
|---|---|
| Lost profit on lost sales | −(f+g) |
| Lost profit on kept sales | <u>−(h+i)</u> |
| Cty B (firm) | −(f+g+h+i) |

**Welfare Effects of ADD in Importing Country, B:**

| | |
|---|---|
| Suppliers gain | +a |
| Demanders lose | −(a+b+c+d) |
| A's gov't | <u>+(c+e)</u> |
| Cty A | e−(b+d) |

Net <u>gain</u> if e > (b+d)

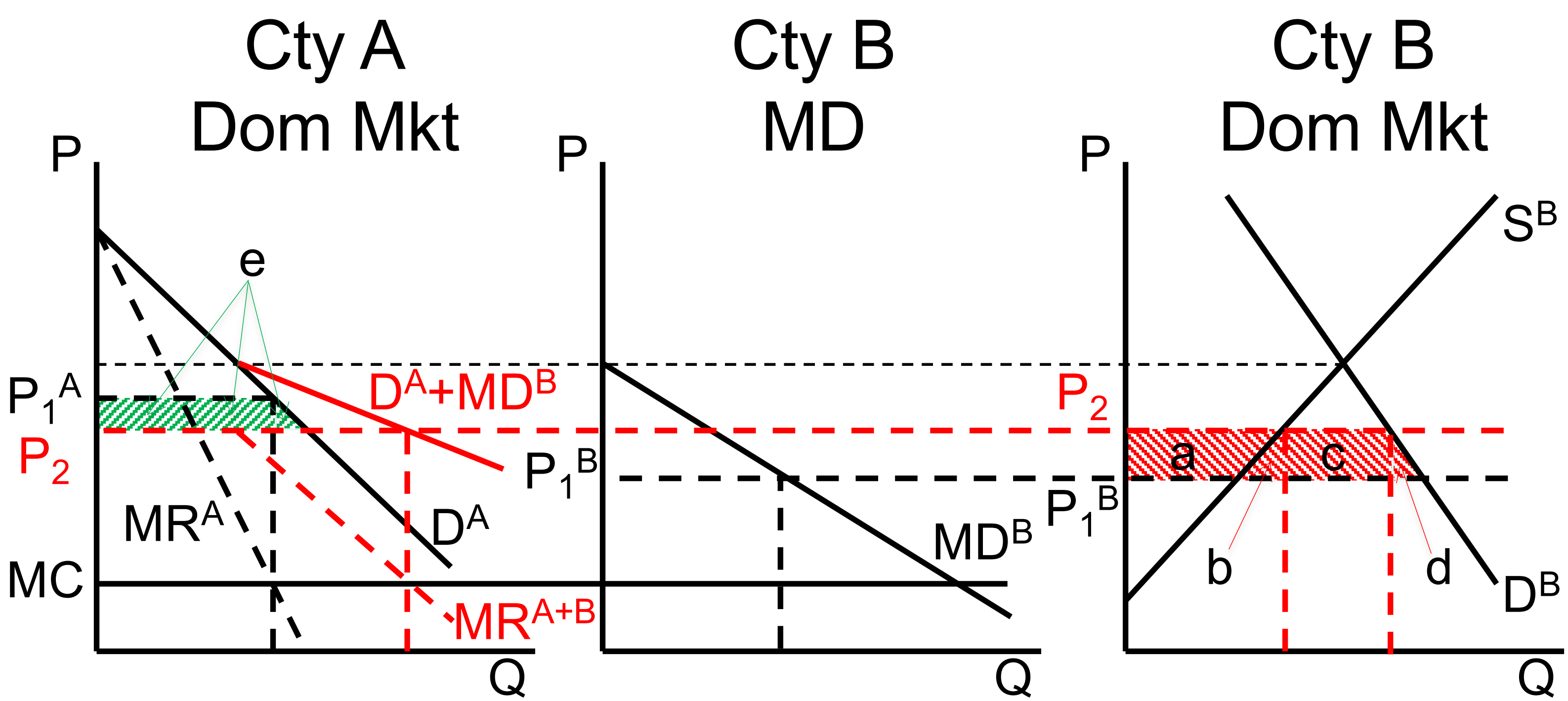
# 3. Not-Dumping Equilibrium




- Now firm combines the two markets, now facing single demand curve $D^A+MD^B$
- Corresponding MR curve, $MR^{A+B}$,
- Determines price $P_2$ charged in both markets
- Result: Price falls at home and rises abroad

- Note welfare effects

# 3. Not-Dumping Equilibrium




| Welfare Effects of No-Dumping in Exporting Country, A: | |
|---|---|
| Demanders gain | e |
| Firm loses | ? |
| Cty A | ? |

| Welfare Effects of No-Dumping in Importing Country, B: | |
|---|---|
| Suppliers gain | +a |
| Demanders lose | −(a+b+c+d) |
| Cty A | −(b+c+d) |

# Summary of ADD Effects

- If export price unchanged
  - Exporter sells less and loses profit
  - Importer has same effects as usual small-country tariff
    - Suppliers gain
    - Demanders lose
    - Government gains
    - Dead-weight loss

# Summary of ADD Effects

- If exporter resets price to maximize profit (and ADD is unchanged)
  - Exporter lowers price, but by less than tariff
  - Exporter loses profit, but loses less than if price unchanged
  - Importer has same effects as usual large-country tariff
    - Suppliers gain, demanders lose, government gains
    - Country may gain
    - Terms of trade improves

# Summary of ADD Effects

- If exporter sets a single price for home and exporter (so as <u>not</u> to dump)
  - Home price falls, export price rises
  - Exporter profit falls
  - Importing country does <u>not</u> use tariff (ADD)
  - Importing country welfare:
    - Suppliers gain
    - Demanders lose more
    - Government gains nothing
    - Terms of trade worsens

# Pause for Discussion

# Questions (Not asked before)

- Of the three cases considered here, which seems most likely to you?
  - No change in dumper’s prices
  - Dumper’s export price changes
  - Dumper changes both prices in order not to dump
- Might the dumper simply raise the export price to equal its home price?